Vector: Sorting random 5 letter using STL vector O(nlogn)

|  |  |  |  |
| --- | --- | --- | --- |
| #of strings | Load Time(Sec) | Operation Time(Sec) | Output Time(Sec) |
| 10000 | 0.00371 | 0.01562 | 0.4062 |
| 20000 | 0.00743 | 0.04625 | 0.8125 |
| 50000 | 0.01562 | 0.10937 | 2.0937 |
| 5000000 | 0.563529 | 6.29659 | 22.7611 |

Removes\_dups\_same\_order random 5 letter using STL vector O(n^2)

|  |  |  |  |
| --- | --- | --- | --- |
| #of strings | Load Time(Sec) | Operation Time(Sec) | Output Time(Sec) |
| 1000 | 0.000299 | 0.016531 | 0.006827 |
| 5000 | 0.001066 | 0.308699 | 0.023219 |
| 10000 | 0.0017 | 1.20285 | 0.047875 |
| 20000 | 0.003513 | 4.68188 | 0.093603 |

Remove\_dups\_any\_order random 5 letter strings using STL vector O(nlogn)

|  |  |  |  |
| --- | --- | --- | --- |
| #of strings | Load Time(Sec) | Operation Time(Sec) | Output Time(Sec) |
| 10000 | 0.00194 | 0.01128 | 0.055441 |
| 50000 | 0.007807 | 0.057751 | 0.232182 |
| 1000000 | 0.115112 | 1.17444 | 4.30502 |
| 5000000 | 0.546885 | 6.39175 | 18.2514 |

Mode Random 5 letter strings using STL vector O(nlogn)

|  |  |  |  |
| --- | --- | --- | --- |
| #of strings | Load Time(Sec) | Operation Time(Sec) | Output Time(Sec) |
| 1000000 | 0.12155 | 1.14528 | 0.008144 |
| 2000000 | 0.234617 | 2.48813 | 0.017197 |
| 3000000 | 0.347182 | 3.6755 | 0.026987 |
| 4000000 | 0.457682 | 4.9335 | 0.036211 |

Link\_list: Sorting random 5 letter using STL Link\_list O(nlogn)

|  |  |  |  |
| --- | --- | --- | --- |
| #of strings | Load Time(Sec) | Operation Time(Sec) | Output Time(Sec) |
| 10000 | 0.002023 | 0.014519 | 0.05487 |
| 100000 | 0.015769 | 0.139079 | 0.469856 |
| 1000000 | 0.123195 | 1.91518 | 4.52348 |
| 2500000 | 0.288051 | 5.43801 | 11.5424 |

Remove\_dups\_same\_order random 5 letter using STL Link\_list O(n^2)

|  |  |  |  |
| --- | --- | --- | --- |
| #of strings | Load Time(Sec) | Operation Time(Sec) | Output Time(Sec) |
| 1000 | 0.000288 | 0.01868 | 0.005927 |
| 5000 | 0.00103 | 0.335805 | 0.023243 |
| 10000 | 0.001958 | 1.31404 | 0.045786 |
| 20000 | 0.00313 | 5.36458 | 0.095128 |

Remove\_dups\_any\_order random 5 letter strings using STL Link\_list O(nlogn)

|  |  |  |  |
| --- | --- | --- | --- |
| #of strings | Load Time(Sec) | Operation Time(Sec) | Output Time(Sec) |
| 10000 | 0.001963 | 0.01457 | 0.055386 |
| 100000 | 0.015181 | 0.143474 | 0.462277 |
| 1000000 | 0.117902 | 2.03045 | 4.2965 |
| 2000000 | 0.227194 | 4.87345 | 8.99631 |

Mode Random 5 letter strings using STL link\_list O(nlogn)

|  |  |  |  |
| --- | --- | --- | --- |
| #of strings | Load Time(Sec) | Operation Time(Sec) | Output Time(Sec) |
| 10000 | 0.002012 | 0.014562 | 0.000364 |
| 100000 | 0.015734 | 0.144778 | 0.000863 |
| 1000000 | 0.124242 | 2.04525 | 0.010781 |
| 2500000 | 0.292577 | 5.75526 | 0.024697 |

Remove\_dups\_same\_order random 5 letter using STL hash\_table O(n)

|  |  |  |  |
| --- | --- | --- | --- |
| #of strings | Load Time(Sec) | Operation Time(Sec) | Output Time(Sec) |
| 10000 | 0.001925 | 0.012281 | 0.056058 |
| 100000 | 0.014728 | 0.111993 | 0.445903 |
| 1000000 | 0.120411 | 1.2325 | 4.33653 |
| 5000000 | 0.546689 | 6.574 | 19.0354 |

Remove\_dups\_any\_order random 5 letter strings using STL hash\_table O(n)

|  |  |  |  |
| --- | --- | --- | --- |
| #of strings | Load Time(Sec) | Operation Time(Sec) | Output Time(Sec) |
| 100000 | 0.014304 | 0.084487 | 0.453863 |
| 1000000 | 0.120981 | 0.928408 | 4.36483 |
| 5000000 | 0.551241 | 4.70696 | 18.7979 |
| 10000000 | 1.07443 | 8.54076 | 31.4365 |

Mode Random 5 letter strings using STL hash\_table O(n)

|  |  |  |  |
| --- | --- | --- | --- |
| #of strings | Load Time(Sec) | Operation Time(Sec) | Output Time(Sec) |
| 10000 | 0.001655 | 0.009179 | 0.001602 |
| 100000 | 0.015367 | 0.082326 | 0.00111 |
| 1000000 | 0.11955 | 0.92867 | 0.010029 |
| 10000000 | 1.08198 | 9.05208 | 0.096459 |

Bst: Sorting random 5 letter using STL BST O(nlogn)

|  |  |  |  |
| --- | --- | --- | --- |
| #of strings | Load Time(Sec) | Operation Time(Sec) | Output Time(Sec) |
| 100000 | 0.014778 | 0.270534 | 0.461332 |
| 500000 | 0.067925 | 1.65525 | 2.3646 |
| 1000000 | 0.124761 | 3.65812 | 3.65812 |
| 5000000 | 0.572473 | 22.2684 | 22.5799 |

Remove\_dups\_same\_order random 5 letter using STL BST O(nlogn)

|  |  |  |  |
| --- | --- | --- | --- |
| #of strings | Load Time(Sec) | Operation Time(Sec) | Output Time(Sec) |
| 1000 | 0.00029 | 0.00348 | 0.00855 |
| 10000 | 0.001933 | 0.036175 | 0.052316 |
| 100000 | 0.015144 | 0.35723 | 0.450262 |
| 1000000 | 0.122862 | 4.93547 | 4.38605 |

Remove\_dups\_any\_order random 5 letter strings using STL Bst O(nlogn)

|  |  |  |  |
| --- | --- | --- | --- |
| #of strings | Load Time(Sec) | Operation Time(Sec) | Output Time(Sec) |
| 10000 | 0.001952 | 0.027108 | 0.054604 |
| 100000 | 0.015335 | 0.277661 | 0.452435 |
| 1000000 | 0.118084 | 3.84308 | 4.35504 |
| 2000000 | 0.22959 | 8.60036 | 8.32873 |

Mode Random 5 letter strings using STL Bst O(nlogn)

|  |  |  |  |
| --- | --- | --- | --- |
| #of strings | Load Time(Sec) | Operation Time(Sec) | Output Time(Sec) |
| 10000 | 0.001987 | 0.027447 | 0.000911 |
| 100000 | 0.015574 | 0.268769 | 0.000882 |
| 1000000 | 0.125798 | 3.64478 | 0.010205 |
| 2000000 | 0.237916 | 7.96938 | 0.019736 |

Priority Queue: Sorting random 5 letter using STL Priority Queue O(nlogn)

|  |  |  |  |
| --- | --- | --- | --- |
| #of strings | Load Time(Sec) | Operation Time(Sec) | Output Time(Sec) |
| 10000 | 0.001972 | 0.021143 | 0.057221 |
| 100000 | 0.014885 | 0.204906 | 0.450396 |
| 1000000 | 0.120164 | 2.54003 | 4.70496 |
| 10000000 | 1.05469 | 34.4306 | 45.1564 |

Remove\_dups\_any\_order random 5 letter strings using STL Priority Queue O(nlogn)

|  |  |  |  |
| --- | --- | --- | --- |
| #of strings | Load Time(Sec) | Operation Time(Sec) | Output Time(Sec) |
| 10000 | 0.001973 | 0.780887 | 0.048886 |
| 20000 | 0.003579 | 3.14498 | 0.098386 |
| 30000 | 0.00437 | 7.02802 | 0.13985 |
| 40000 | 0.006511 | 11.9334 | 0.187249 |

Mode Random 5 letter strings using STL Priority Queue O(nlogn)

|  |  |  |  |
| --- | --- | --- | --- |
| #of strings | Load Time(Sec) | Operation Time(Sec) | Output Time(Sec) |
| 10000 | 0.001837 | 0.020732 | 0.000354 |
| 100000 | 0.014853 | 0.225388 | 0.001065 |
| 1000000 | 0.118376 | 2.70813 | 0.008439 |
| 2000000 | 0.220233 | 6.01332 | 0.016941 |